



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,360	02/26/2002	Hyun Kim	P56639	2437

7590 10/17/2005

Robert E. Bushnell
Suite 300
1522 K Street, N.W.
Washington, DC 20005

EXAMINER

GIBBS, HEATHER D

ART UNIT	PAPER NUMBER
----------	--------------

2627

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/082,360		KIM, HYUN	
	Examiner		Art Unit	
	Heather D. Gibbs		2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9, 11-20, 22-26, 28, 34 is/are rejected.
- 7) ☒ Claim(s) 6, 10, 21, 27 and 29-33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09/04/03, 07/22/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2,11,13,15-16,22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsai et al (US 6,392,762).

Regarding claim 1, which is representative of claims 15,22, Tsai discloses an apparatus for correcting a scanning error in a flatbed scanner, the apparatus comprising: a white shading plate having a black patch; a reading module accommodating reading of said white shading plate and said black patch; and a controller comparing information of said black patch read by said reading module with a predetermined reference value to correct the scanning error in the flatbed scanner (Col 1 Lines 47-67; Col 5 Lines 24-62).

Regarding claim 2, which is representative of claim 16, Tsai teaches said controller correcting the scanning error by using information of at least one of the edge lines of said black patch read through said reading module and information of at least one of the intervals of said black patch (Col 5 Lines 1-23).

For claim 11, Tsai discloses the predetermined reference value being set based on a pattern of said black patch (Col 5 Lines 63-Col 6 Line 2; Fig 4).

For claim 13, Tsai discloses a transparent glass on which a document is placed and a buffer storing an image read through said reading module, with the controller controlling the output of the image stored in the buffer to correct the scanning error (Fig 4; Col 5 Lines 1-23).

For claim 23, Tsai discloses detecting of edge lines of said black patch (Col 1 Lines 47-67; Col 5 Lines 24-62).

For claim 24, Tsai discloses detecting information of said black patch further comprising of checking the presence of black and white pixels while moving a reading module of said scanning apparatus (Col 1 Lines 47-67; Col 5 Lines 24-62).

For claim 25, Tsai discloses detecting information of said black patch further comprising of checking whether an interval of said white shading plate between a first edge of said black patch and a second edge of said black patch is detected to have white pixels (Col 1 Lines 47-67; Col 5 Lines 24-62).

For claim 26, Tsai teaches extracting the number of pixels corresponding to an interval said reading module is moved vertically on said black patch (Figs 9-10).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2622

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5,7-9,12,14,17-20,34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al (US 6,392,762) in view of Shimamura et al (US 6,246,484).

Regarding claim 5, which is representative of claim 19, Tsai discloses an apparatus for correcting scanning error.

Tsai does not disclose expressly a scan region based on the detection of a rightmost edge line of said black patch through said reading module and a position of a first pixel being read obtained during reading of said white shading plate to correct a scanning error for the position of the first pixel being read.

Shimamura discloses a scan region based on the detection of a rightmost edge line of said black patch through said reading module and a position of a first pixel being read obtained during reading of said white shading plate to correct a scanning error for the position of the first pixel being read (Figs 16; 21; Col 11 Lines 24-50).

Tsai & Shimamura are combinable because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Tsai with Shimamura.

The suggestion/motivation for doing so would have been to correct scanning error for the pixel being read.

Therefore, it would have been obvious to combine Shimamura with Tsai to obtain the invention as specified in claim 5.

For claim 7, which is representative of claim 20, Shimamura discloses setting a scan region based on the detection of the top edge line and a bottom edge line of said black patch read through said reading module and an interval by which the reading module is moved from the top edge line to the bottom edge line (Figs 9-10).

For claim 8, which is representative of claims 17, Shimamura discloses setting the scan region accommodating a skew of said reading module being corrected by comparing the interval by which said reading module is moved with a predetermined reference value (Fig 1; Col 4 Lines 20-33).

For claim 9, which is representative of claim 34, Shimamura teaches a controller adjusting a scan rate based on predetermined right and left intervals with respect to the center of said black patch read through said reading module (Fig 10).

For claim 12, Shimamura teaches a memory for storing the predetermined reference value (Col 9 Lines 34-41).

For claim 14, Shimamura teaches said black patch including a center dividing said black patch into two equal patterns, said black patch being symmetric about the center line (Fig 9).

For claim 18, Shimamura discloses a scanning start line being corrected based on the detected difference (Col 4 Lines 20-33).

For claim 28, Shimamura teaches detecting a first pixel being read while reading of said white shading plate; and detecting a pixel difference between where the first pixel is read and the point where the edge line has been detected (Col 4-Col 9).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 3-4 recite the limitation "the number of pixels" in Line 2 of both claims.

There is insufficient antecedent basis for this limitation in the claim.

Allowable Subject Matter

7. Claims 6,10,21,27,29-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

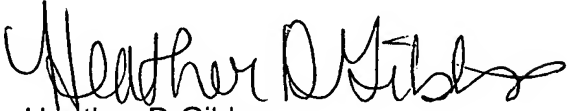
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather D. Gibbs whose telephone number is 571-272-7404. The examiner can normally be reached on M-Thu 8AM-7PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Cole's can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Heather D Gibbs
Examiner
Art Unit 2622

hdg


EDWARD COLES
PRIMARY PATENT EXAMINER
ART UNIT 2600